2: Gamble S-5 (1926-1933) 1954 AF12 North China AF12

than persons in the average house. The average was 0.9 persons per room. It must be remembered, however, that the number of rooms reported included not only the living rooms of the family but storerooms for farm equipment and supplies and rooms used to house animals. How the number of rooms per family and per person varied in the different income groups is shown in Figure 15 and Table 36. The high average of 1.5 persons per room in the $400–$500 group would lead one to feel that these larger families might recently have been augmented by the addition of extra relatives and had not had time to adjust themselves to the new situation, or possibly there was not room for additional building on the home site inside the village. Certainly there was sufficient surplus in the family budget to finance additional building.

The size of the individual houses varied from three to 15 chien. The 229 chien were divided into 102 with earthen walls and 127 with brick walls. Three of the earthen walled and 23 of the brick walled rooms had porches. The rent value of the different types of houses was estimated to range from $1.80 to $4.20 per chien per year. The average rent per family was $1.55 per month, 6.4 per cent of the family expenditure. For the different income groups the average amount varied from 79 cents to $2.07 per month. (See Table 38.) All of the families owned their homes, so the rent item represents rent value rather than actual expenditure.

The type of house was not closely related to the size of the family income. Twenty-four of the families had some brick walled rooms. Thirteen of these also had earthen walled rooms. Four of the 14 families in the $300–$400 income group had only earthen walled rooms. One family in the $100–200 group had only brick walled rooms.

No rent for farm land was included in the family expenditure as that was a farm expense and was paid from the gross farm income.

Most of the $19.55 used for fuel was the value of the dried grass and stubble and wood grown on the farm or secured from neighbors. Coal, kerosene, and matches, of course, had to be imported. The distribution of the fuel costs was:

Hay and wood	$15.15
Coal	2.25
Kerosene	1.90
Matches	.25
	$19.55

2: Gamble S-5 (1926-1933)1954 AP-12 North China AP-12

The amounts reported for wood and dried grass ranged from $6 to $25. Only 20 families used any coal. Ten dollars was the most any family spent for that item. The average amount of kerosene was 15.58 catties per family per year, or just over one-half of a tin. For the individual families the amounts ranged from 5.5 to 25 catties. The average daily use was one-half Chinese ounce that cost two coppers. The price per catty was 14 cents, $3.57 per tin. The 25 cents spent for matches bought 55 boxes.

Miscellaneous expenditures naturally included a large number of different items. In this study they have been divided into 10 different groups. The amounts spent for each of these by the families in the different income groups are shown in Table 38. Most of the amounts were small. Even the highest total for all 10 groups was less than $2.50 per month. For three of the four income groups the total for miscellaneous was less than 7.0 per cent of the total expenditure.

Under the head of social expenditure were included the amounts spent for cakes sent as gifts for weddings, funerals, or the birth of a child, or bought to entertain visiting relatives; the eggs sent at the birth of a child; the special expenses for New Year; and money given to the children at New Years' or to a bride.

All the families bought some wine. The average expenditure was $1.02. Locally grown tobacco was much more generally used than the imported cigarettes. Twenty-six families used an average of 6.3 catties of tobacco. The 12 families buying cigarettes reported the purchase of 262 packages. Each package contained 10 cigarettes. The price of the tobacco was 17.5 cents a catty, of the cigarettes five cents per package. The seven families using tea leaves used an average of five ounces per family per year. The average price was just under five cents an ounce.

All of the families went to the temple fair and the theaters. The average expenditure for these amusements was 75 and 55 cents per family. Other amusements included gambling, fortune telling, watching a magician, and the cost of birds to be kept in a cage. Fortune telling and sleight of hand evidently were not very prosperous businesses for the total contribution to them was only 37 cents. The two families that bought birds spent $2 apiece.

The list of house furnishings purchased during the year included 29 items, but the only one reported by all 34 families was chopsticks. Only five items were reported by over half of the families. The average

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

Coalballs, the most generally used fuel in Peiping, are a mixture of coal dust and yellow earth. When wet, this mixture is cut into small cubes some two inches on a side. These are rolled into balls in a large flat basket, and then dried.

The *Cost Consumption Unit* is used to measure the requirements of members of a family in terms of those of an adult male. It allows for the differences in consumption due to differences in age and sex, and also the number of persons in the family in the different age and sex groups. Scales for food, clothing, rent, house furnishings, based on a study of American family budgets, have been worked out by the United States Department of Agriculture, but only the food scale has been used in this study. Not enough information has been collected to make it possible to determine how well any of the scales fit Chinese conditions. In using the food scale it has been necessary to assume that, at present, it is the best one available. The scale of units for food expenditure is given in the following table. When figuring the number of units in the Chinese families we have increased the limits of the age groups one year to allow for the difference between the Chinese and Western methods of figuring age.

COST CONSUMPTION UNITS FOR REDUCING FOOD EXPENDITURES TO TERMS OF AN ADULT MALE [5]

	First individual in age and sex group	Each additional individual in age and sex group
MALE		
19 and over	1.0	0.9
15 to 18 inclusive	.8	.7
FEMALE		
19 and over	.9	.8
15 to 18 inclusive	.7	.6
MALE OR FEMALE		
12 to 14 inclusive	.6	.5
6 to 11 inclusive	.4	.3
5 or less	.3	.2

[5] No. 45.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

groups, the average was between $14.50 and $17.80 per year. The minimum, $12.60, was the average for the $5 group; the maximum $27.80, the average for the $300 group. There were five income groups with averages of more than $20 per room. Four of these were the groups with incomes between $15 and $35 a month. Their high averages may be accounted for in part by the fact that the average number of rooms per family is less than two for all the groups below $35 a month.

The average expenditure per person increased fairly regularly. It was $5.05 for the $10 group; $10.40 for the $40 group; $15.90 for the $100 group; $17.50 for the $200 group; and $24.85 for the $300 group. (Table 30.)

When the families are grouped according to the amount of income per cost consumption unit, rather than the amount per family, the proportion spent for heat, light, and water shows a regular and steady decrease from 11.6 per cent for the group receiving $5 to $9.99 per month, to 4.1 per cent for the group with more than $60 per unit per month. (Table 14.)

Fuel

Peiping is fortunate in having coal available in the Western Hills some 15 miles from the city walls, near enough to be brought in on camelback, as well as by train. Large amounts are also shipped by railroad from the Kailan and other mines in Hopei and Liaoning. Coal also comes from Shansi when the railroads are able to transport it.

Lump coal was used to some extent by 220 families. The average expenditure for the year, however, was only

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

family per year was less than 500 pounds for all the income groups below $70 a month. For the $10 group, the average was only 250 pounds for the families that used any coal, and 125 pounds for the entire group. Not until the family income was over $80 a month, did the families use an average of 1,000 pounds of coal a year; and not until the income was over $90 a month, did they use over 1,000 catties, 1,333 pounds, a year. (Table 32.) The $150 group purchased an average of 3,620 catties, 2.4 tons; the $300 group 6,600 catties, or approximately 4.4 tons.

Because of the small amounts of coal used in the lower income groups, it seems evident that few, if any, families with incomes less than $125 a month regularly used foreign-type coal stoves for heating throughout the winter, even though this type of stove is made locally and sells for a relatively low price. The families in the $300 group definitely used coal for a large part of their heating, as all their purchases of coal were made during the winter months. Presumably they burned it in foreign-type stoves. Other income groups purchased some coal every month of the year.

A large part of the coal shipped to Peiping comes as coal dust. The coal stores use this in making "coalballs," which are burned by most families living in Peiping. The coal dust is mixed with water and a kind of yellow earth found outside the city walls. This mixture is spread out some two inches thick and then cut into cubes. These are put, a few at a time, into large flat baskets which are tilted back and forth until the cubes are rolled into balls. They are then spread out to dry.

Coalball stoves are usually very simple, with a few grate

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

regularly showed considerable differences. The difference between the highest and the lowest quotations averaged 40 cents per 1,000 catties for 1927, and 93 cents for 1929.[8] This price spread may have been due to a difference in the quality of coal used, but more probably was the result of mixing more or less earth with a given amount of coal dust. In some stores, the price of coal dust and coalballs was virtually the same. The profit made by selling yellow earth at the price of coal dust evidently covered the cost of making the coalballs.

All but three families reported the purchase of coalballs. These three secured their entire fuel supply by sending the children to pick over the ash dumps for half-burned fuel, or to the railroad yards to look for coal along the tracks. Fifteen families reported that they secured part of their fuel supply in this way. Ordinarily it was the children who went out to pick up fuel, but in three families it was the mother, and in one the seventy-year-old grandmother. The value of the fuel the families were able to find has not been taken into account in our averages.

The average amount spent for coalballs per year was $9.98 for the $5 group; $22.15 for the $30 group; $44.35 for the $90 group; and $66 for the $300 group. The amount used per family varied from 1,450 catties, 1,930 pounds, for the $5 group, to 9,550 catties, 6.5 tons, for the $300 group. It was 2,730 catties, 1.8 tons, for the $25 group; and 4,030 catties, 2.7 tons, for the $50 group. (Figure 20 and Tables 31 and 32.)

Coal and coalballs together totaled 1,600 catties, 1.1 tons, per family per year for the $5 group. This was less than six pounds a day. The $25 group used almost twice

[8] No. 11.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

511 give the $50 group 46 pounds a day for four months, almost eight times as much as the Chinese average. From November to February, the monthly mean temperature in Peiping ranges from 18.9 to 37 degrees Fahrenheit.[11] There is usually some zero weather during the winter.

Considering the fact that such a large part of the fuel is used primarily for cooking, one would expect greater similarity in the average amounts per person, than in the amounts per *chien*. Just the opposite is true. As the family income increased, the per capita consumption of coal and coalballs increased from 480 catties for the $10 group, to 1,070 catties for the $50 group; 1,540 catties for the $100 group; and 1,970 catties for the $300 group. The amount per *chien* varied from 1,900 to 2,040 catties for the groups between $15 and $35; and was 2,210 catties for the $300 group. For all the other groups, it fluctuated between 1,100 and 1,630 catties. The expenditure per *chien* was between $16.20 and $17.70 for the groups between $15 and $35; and was $18.80 for the $300 group. For the other income groups, the amount varied from $9.20 to $13.45, with most of the averages between $10.30 and $12.45. The fact that the average number of rooms is less than two per family until the income is over $40 a month, possibly may account for the higher figures in the lower income groups.

372 511 Charcoal was bought by 264 families. For the different income groups, the average expenditure per family reporting the purchase of charcoal varied from $1.45 to $4.85 per year, except for the $300 group. The average for that group was $10.05. The price of charcoal was $3.23 per 100 catties, so for most of the income groups

[11] No. 17.

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

the average amount bought during the year varied from 80 to 100 catties. For only six groups was it over 100 catties.

Wood used as kindling appeared on the accounts of 252 families. The income group averages per family reporting varied from 72 cents to $11.65 per year. For only two groups, was the amount less than $1; and for only four was it over $6 a year. The price of wood being $1.30 per 100 catties, the lower income groups must have kindled their fires with great care, or found and carried home considerable amounts of wood. One investigator stated that it required about one-half catty of wood to light a coalball stove. Some families use charcoal, in which case a smaller amount is needed.

Light

The average expenditure for light for the year ranged from $2.05 for the $5 group, to $60.25 for the $300 group. It took from 2.1 to 1.3 per cent of the family income and, on the average, was only a little less than one-fifth of the combined expenditure for heat, light and water. Kerosene was the chief source of light for the poorer families, and was used to some extent by almost all the families. Electricity was used by about one-third of the larger income families. The cost of light per *chien* ranged from $1.55 to $8.25 per year; but, except for the highest and lowest income groups, the amount tended to be between $3.25 and $3.80 per *chien*. The use of electricity by the higher income groups did not seem to affect this tendency. The annual per capita expenditure

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

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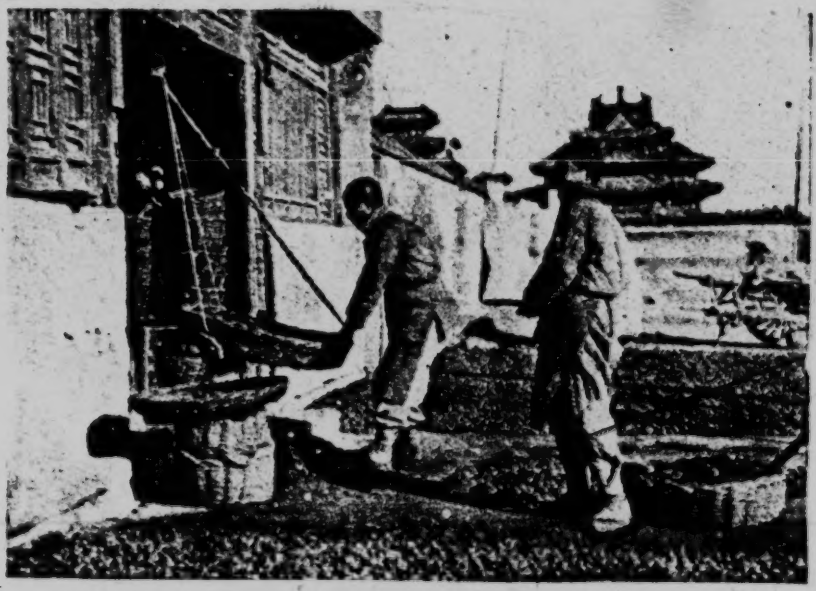

MAKING COALBALLS

A mixture of coal dust and yellow earth, cubed, rolled into balls in a swinging basket, and dried, is used for fuel by almost every family in Peiping.

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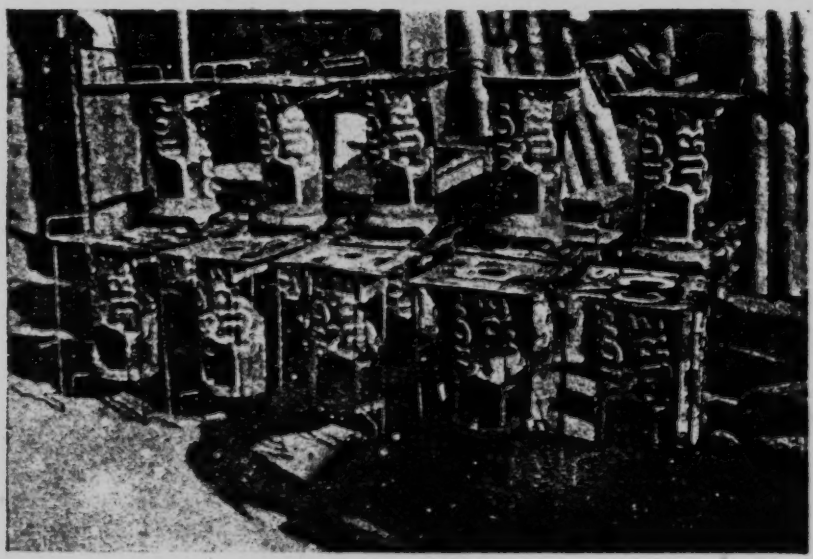

COALBALL STOVES

Often made from clay, or clay-lined kerosene tins; these are made from old cough-cure advertisements.

[FACING p. 156]

7: Gamble S-5 (1926-1927) 1933 AF12 North China AF12

house; the $80 group a little over three lights for 4.8 *chien;* and the $300 group nearly six lights for a house with 7.3 *chien.*

One hundred and twenty-eight families reported some expenditure for candles, but usually only a small amount. Even for the families purchasing candles, none of the income groups had an average expenditure of $1 a year per family. For half the groups, the average was less than 25 cents per family. These figures, however, do not include the candles purchased by 26 families for use in connection with religious observances. They are included as expenditure for religion. The Chinese terms for the two kinds of candles are quite distinct. The ordinary candle is called *yang la,* or foreign candle, the other *kung la,* or offering candle.

Matches were entered on all but six of the accounts. The amounts were naturally small. The average retail price in Shanghai was 5.2 cents for a package of ten boxes of safety matches.[16] The Peiping price was probably only slightly higher. Fifty-seven families spent less than 10 cents for matches during the year. Only 30 spent more than 50 cents, and three more than $1. The average per family was 12 cents for the $5 group; 28 cents for the $25 group; 40 cents for the $60 group; and 70 cents for the $200 group. This last was the largest of the income group averages. Many families also probably secured matches from the rag-pickers, who go from door to door collecting rags and old cloth, and give in exchange small boxes of matches.

[16] No. 9.

8: Lin E-5 (1927)1928 AF12 North China AF12

362 equivalent adult males, and the average amount of rent was $22.88
511 a year per family or $4.67 a year per capita. Very few families
427 could afford to live in two-roomed houses. The common way is to rent a one-and-half room house which consists of a kitchenet and a bed room. Sometimes two families may share a three-roomed house with 1½ rooms for each. Thus it is possible to do cooking in one room and sleep in the other. But it is also found that certain families live in one room where a kitchen stove is connected with the *kang*. This is not only uncomfortable but also far from being hygienic, since food is prepared in the bed-room.

511 The clothes the worker and his people wear are generally
291 made of cloth. Imported satin is hardly used except in very few families with high income. Some poor families were found to buy flour bags from the factory and make them into garments.

511 Expenses for fuel and light include those for coal, reeds (a
372 plant used for fuel in North China) oil, and water. Some families picked their own reeds and coal for fuel. The value of fuel for such families was estimated and included both in family income and in the fuel expenses.

511 Miscellaneous expenses are exceptionally high, as they include both ordinary expenses for sanitation, social intercourse, tea and tobacco, furniture, toilet articles, new year entertainments, religion and amusements, and occasional expenses for transportation, education, medicine, marriage and funeral service. Extra charge for marriage and funeral accounted, in most cases, for the swelling of the expenditure figures in the miscellaneous group. For instance, the marriage and funeral expenses of the family in the sixth income group alone amounted to $120 which is much higher than the miscellaneous expenses of any other group.

In Table 38, the income, total expenses and food expenses per family together with the total and food expenses per adult male are classified according to equivalent adult male groups. It may be noted from the Table that income, total expenses and food expenses per family increase with the number of equivalent adult males in family of each group, but food expenses per equi-